



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,361	03/26/2002	Sebastien Weitbruch	PD990070	7610

7590

07/01/2004

Joseph S Tripoli  
Thomson multimedia Licensing  
Cn 5312  
Princeton, NJ 08540

EXAMINER

CHANG, KENT WU

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 07/01/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,361

Applicant(s)

WEITBRUCH ET AL

Examiner

Kent Chang

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on the Amendment filed 3/26/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6 and 9 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 3/26/02 is in compliance with the provisions of 37 CFR 1.97 and all of the references listed in the IDS have been considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al (EP-A-0 893 916, submitted by applicant in a IDS) in view of Okano et al (EP-A-0 720 139, submitted by applicant in a IDS).

Kawahara teaches a method for processing video pictures for displaying on a display device, wherein the time duration of a video frame or video field is divided into a plurality of subfields (Fig.9) during which the pixels can be activated for light emission in pulses corresponding to a subfield code word (Figs.3a-6b) which is used for brightness control, wherein each subfield is assigned a specific subfield weight (the luminance weight), wherein motion vectors are used to determine corrected subfield code words for pixels (the

Art Unit: 2673

motion vector, fourth embodiment in Figs.19 and 25). Kawahara is silent in how to calculated the motion vectors.

However, Okano teaches a method for calculating motion vectors separately for a group of subfields from the plurality of subfields (see page 7, lines 30-31 and Fig.10). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to calculate motion vectors separately for a group of subfields from the plurality of subfields as taught by Okano in the method of Kawahara so as to generate an accurate motion vector.

Consider claim 2. Okano also teaches a gradient determination step (means for detecting the decrease of the luminance, see page 7 lines 22-27).

Consider claim 7. Okano also teaches the subfield entry shifts (A1 of corrected pixel data of frame n, see Fig.3).

Consider claim 8. Okano also teaches using the method in a PDP for dynamic false contour compensation (see page 2 lines 5-6).

#### ***Allowable Subject Matter***

4. Claims 3-6 and 9 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teaches a method for processing video pictures for displaying on a display device wherein a motion vector calculation is done based on a single bit picture, wherein each pixel of the single bit picture is equal to a dedicated entry of the corresponding subfield code word for the pixel as recited in the claims.

Art Unit: 2673

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kobayashi et al (US Patent No. 6,348,930); Weitbruch et al (US Patent No. 6,473,464); De Haan et al (US Patent No. 6,501,446); Van Dijk (US Patent No. 6,525,702).

**CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Chang whose telephone number is 703-305-4824. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 703-305-4938.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2673

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer

Service Office whose telephone number is 305-9700.



Kent Chang  
Primary Examiner  
Art Unit 2673

Kc

6/28/04